# PATELLAR TENDINITIS (Jumper's Knee)

### ♦ What is it?

Patellar tendinitis is characterized by inflammation and pain at the patellar tendon (the tendon below the kneecap). This structure is the tendon attachment of the quadriceps (thigh) muscles to the leg. This structure is important in straightening the knee or slowing the knee during bending or squatting.

# Signs and Symptoms of this Condition

- ➤ Pain, tenderness, and/or swelling over the patellar tendon, lower tip of the patella (kneecap), or at the tibial tuberosity (bump on the upper part of the lower leg).
- ➤ Pain and loss of strength (occasionally) with forcefully straightening the knee (especially when jumping or when rising from a seated or squatting position) or bending the knee completely (squatting or kneeling).
- > Crepitus (a crackling sound) when the tendon is moved or touched.

#### Causes

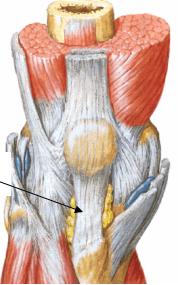
- Primarily an overuse condition.
- Repetitive jumping activities (such as in basketball or volleyball).

### ♦ What Can I do to Prevent Patellar Tendinitis?

- Appropriately warm up and stretch before exercise, practice, or competition.
- ➤ Allow time for adequate rest and recovery between exercise bouts, practices and competition.
- > Maintain appropriate conditioning:
  - Cardiovascular fitness
  - Thigh and knee strength
  - Flexibility and endurance
- ➤ To help prevent recurrence, taping, protective strapping or bracing, or an adhesive bandage may be needed for several weeks after healing is complete.

## Prognosis

Acute patellar tendinitis will normally resolve in 6-8 weeks given sufficient rest from prolonged walking, running, and jumping; daily ice treatment; and quadriceps stretching. It will



Patellar Tendon not improve by continuing to play, run, or work through the pain while continuing to run, jump, and perform the precipitating activities. Chronic patellar tendinits (cases in which athletes continue to push through the pain with symptoms lasting longer than 6-8 weeks and often developing a knot or nodule in the tendon) can take 6-9 months or longer to heal.

Anti-inflammatory medication can also help in resolving this condition.

#### **♦** Treatment

- ➤ Rest NO running, jumping, stair machine, or biking for exercise.
- ➤ Ice massage over the patellar tendon 10 minutes 1-2 times per day. (Ice massage is performed by filling paper or foam cups with water and freezing them. Take the frozen cup and tear off the outer edge of the cup near the lip to expose the ice. Hold the cup with one hand and place the ice portion so that it is in contact with the injured/painful area and rub in circles over the painful area).
- Anti-inflammatory medication (aspirin, ibuprofen, etc) may be helpful in reducing both pain and inflammation.
- ➤ Quadriceps and hamstring stretching (hold each stretch 30 seconds, repeat 2-3 repetitions, 2 times per day).
- ➤ Quadriceps strengthening through painfree partial squats (45 degree knee bend going down quickly [in 1 second] and up slower [2 seconds], 3 sets of 10 reps once daily. Perform this after quadriceps and hamstring stretching and repeat the same stretches again immediately following the squatting exercise. Finish with ice massage over the tendon for 10 minutes as described above.
- ➤ Change to a new pair of running shoes if indicated.
- > SLOWLY progress back into jogging by alternating between walking and jogging every other day with a gradual increase in jogging distance and decrease in walking distance until performing straight jogging.